

# MINI EXCAVATOR



**Specifications** 

Operating weight 2010 kg

12.0 kW (16.3 HP) Engine power

**Bucket capacity** 21 - 91 I 2.54 / 2.74 m Digging depth 4.17 / 4.37 m Reach

## Extra-wide blade for dozer applications

- ▶ Top-mounted boom cylinders for perfect protection of cylinders and larger range of application
- ▶ Comfort cab with excellent visibility (canopy as option)
- ▶ Knickmatik® allows for working closely along walls
- ▶ Wide range of proven working tools

# **SPECIFICATIONS**

#### **ENGINE**

Manufacturer, model	Kubota, D902 Tier 4 final
Туре	3-cylinder diesel engine
Bore x stroke	72 x 73.6 mm
Displacement	898 cm <sup>3</sup>
Power rating acc. to ISO 14396 @ 2300 rpm	12.0 kW (16.3 HP)
Torque max. @ 1800 rpm	52.1 Nm
Air filter with safety cartridge and maintenance switch	
Cold-starting aid	Glow plugs

#### **ELECTRICAL SYSTEM**

Nominal voltage	12 V
Battery	12 V / 44 Ah
Generator	12 V / 40 A
Starter	1.4 kW
Lighting system:	1 work light front left on the cab / canopy
	(auxiliary headlamps optional)

## TRANSMISSION

Two-stage hydrostatic travel drive with axial piston variable displacement motor and reduction gear, fully enclosed. "Straight-Travel" function. Travel brake valves for downhill travel

Travel speed, 1st gear	2.2 kph
Travel speed, 2 <sup>nd</sup> gear	4.2 kph

Forwards and backwards respectively. Manual switching via button on dozer lever.

#### UNDERCARRIAGE

Torsion-proof welded design. Hydraulically retractable/extendable undercarriage provided as standard. Maintenance-free crawler-type undercarriage. Idler suspension with hydraulic crawler-chain tensioning. Sliding plate at the top

Range of adjustment, outside edge of crawler chains	990 – 1340 mm
Width rubber tracks (short pitch)	230 mm
Total length (undercarriage)	1490 mm
Number of rollers per side	4
Track width	760 - 1110 mm
Gradeability	max. 60%
Drawbar pull 1st / 2nd speed range	1400 / 780 daN

#### **DOZER BLADE**

Independent of drive train, sensitive control via separate hand lever							
Width x height	1340 x 235 mm						
Dozer cut below ground	160 mm						
Dozer lift above ground	200 mm						
Slope angle	25°						

#### **STEERING**

Independent individual control of crawler chains, also counterwise. Sensitive actuation via manual levers, combined with pedals, foot rest on pedal console

#### **SWING SYSTEM**

Internally toothed ring gear	
Swing speed	0 – 9 rpm

#### **SWING BRAKE**

Hydrostatic drive, also acts as wear-resistant brake. Additional spring-loaded multi-disc brake. Considered as transport security



#### **FLUID CAPACITIES**

Fuel tank	27 I
Hydraulic system (incl. tank 21 l)	26 I

#### **KNICKMATIK®**

Lateral parallel adjustment of boom arrangement at full dig depth.	
Angle of articulation / lateral adjustment left	59° / 414 mm
Angle of articulation / lateral adjustment right	60° / 555 mm

## **OPERATING DATA, STANDARD EQUIPMENT**

Operating weight according to ISO 6016: Cab with 600 mm bucket, quick-attach s	system,
1st additional control circuit, rubber tracks, including driver, full fuel tank	2010 kg
Operating weight according to ISO 6016: Canopy with 600 mm bucket, quick-atta	ch system,
1st additional control circuit, rubber tracks, including driver, full fuel tank	1930 kg
Transport weight: Cab, tank half full, with quick-attach system, w/out bucket	1885 kg
$\label{thm:constraint} \textbf{Transport weight: Canopy, tank half full, with quick-attach system, w/out bucket}$	1805 kg
Total length (travel position)	2853 mm
Total length (trailer transport position)	4133 mm
Total height (top of canopy / cab)	2277 / 2294 mm
Total height (travel position)	2673 mm
Total width (undercarriage)	990 – 1340 mm
Total width of uppercarriage	980 mm
Uppercarriage tail swing	1140 mm
Uppercarriage front swing	1440 mm
Working envelope, bucket heaped (also with 600 mm bucket): 180° 360°	2580 mm 2883 mm
Swing clearance	446 mm
Reach max.**	4171 / 4368* mm
Digging depth max.**	2541 /2741* mm
Loading height approx.**	2593 / 2734* mm
Highest reachable height**	3642 / 3772* mm
Bucket rotation angle	191°
Bucket digging force acc. to ISO 6015	18,850 N
Stick digging force acc. to ISO 6015	11,000 / 9720* N
Specific ground pressure: Excavator cpl.	0.30 daN/cm <sup>2</sup>
* with dipperstick 1150 mm (optional)	

\*\* Dimensions apply to machine standing on level ground, but can be increased by tilting the machine using the blade.



#### **HYDRAULIC SYSTEM**

Pump capacity, max.36.3 l/minWorking pressure250 bar

Dual gear pump

Load independent flow distribution (LIFD) for all working movements and travel drive

Simultaneous independent control of all functions

All excavator movements servo-controlled, ISO

All functions are proportionally controllable

Hydraulic oil cooler

Full flow filtration through return filter

Cylinders for boom, dipper arm and articulation with end position damping at both ends

Bucket retract function with end-position damping

Safety shutdown activated by exit barrier

Additional control circuit as standard: Terex 'Fingertip' control (electro proportional) for additional control circuit for work attachments on right joystick, including holding function for continuous operation, actuation via rollers

Additional control circuit with bypass for pressure-reduced return quantity

Hydraulic power to the couplings:

Pump capacity (pressure-controlled)

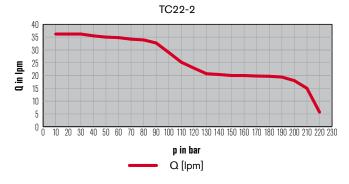
 @ 145 bar
 36.3 lpm

 @ 210 bar
 21.1 lpm

 Max. working pressure
 210 bar

Diagram shows P/Q provided on couplers:

p/Q characteristic curve for additional control circuit 1



## **CAB (STANDARD)**

Spacious, sound-insulated full-vision steel cab, FOPS\*\*\* (acc. to ISO 3449), ROPS and TOPS (acc. to ISO 12117) certified

Very good all-round visibility, lean vertical support members

Safety glass

Front window supported by pneumatic springs, slidable under cab roof

Fixed window part without frame which obstructs the forward view

Door with large access on left hand side

Foldable console on left hand side for large entry access

Right door as emergency exit

Matching locks of hood, ignition and tank cap

Central connector for electrical cable

Wiper washer with wiper for windscreen

Interior light, coat hook

Operator's seat (comfort version), fabric-covered:

Longitudinal and back tilt adjustment

Continuous weight adjustment as per operator's weight

Safety hel

Armrests height adjustable without tools

Cables for radio installation kit

Prenaration for antenna

Large storage compartment under the operator's seat

Heating (water) with 2-speed fan and 4 adjustable exhaust nozzles

Temperature controller in cab

Storage pocket behind the operator's seat

Storage compartment for mobile phone (near 12V outlet)

1 left-hand outside rear-view mirror, foldable in front of windshield

1 working floodlight front left as standard

Display, fuel gauge, hour meter and warning lights

Fuse box easily accessible from outside of the cab

Very good ergonomics

Ergonomically arranged dozer blade lever

Fast / slow switch on dozer blade lever

Yellow beacon, radio, immobilizer (anti-theft device), working floodlights prepared for optional installation

\*\*\* FOPS-approved only with skylight guard (optional)

#### CANOPY

Robust steel pipe construction. 4 support members for the best all-round visibility

1 working floodlight front left

FOPS (acc. to ISO 3449), ROPS and TOPS (acc. to ISO 12117) certified

Operator's seat (standard version), imitation leather:

Longitudinal and back tilt adjustment

Continuous weight adjustment as per operator's weight

Safety belt

Large lockable storage compartment under the operator's seat

Storage pocket behind the operator's seat

Display, fuel gauge, hour meter and warning lights

Easy and quick change of canopy to cab and vice-versa (< 1 hour)

Yellow beacon, immobilizer (anti-theft device), working floodlights prepared for optional installation

Reduction weight canopy 80 kg

#### **CRANE TRANSPORT**

Crane lifting beam for cab and canopy

#### **SOUND LEVEL VALUES**

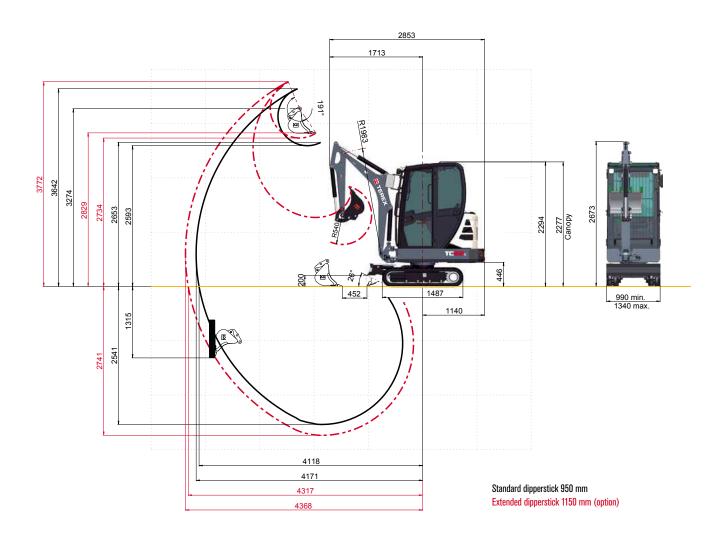
Noise emission ambience  $L_{WA}$  cab / canopy 93 / 93 dB (A) Noise emission cab  $L_{ac}$  cab / canopy 79 / 79 dB (A)

Sound level values measured in compliance with Directive 2000/14/EC and EN474

#### VIBRATION VALUES

Effective values of acceleration for whole body less than  $0.5 \text{ m/s}^2$  Effective values of acceleration for hand-arm less than  $2.5 \text{ m/s}^2$ 

Vibration values in compliance with Directive 2006/42/EC and EN474



## **DIMENSIONS**

Fig. 1, 2: Excavation within the entire width of the machine

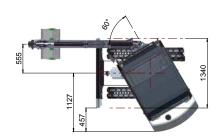
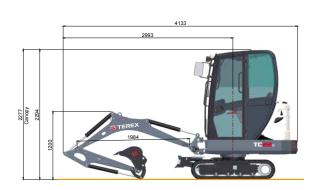


Fig. 3: Transport position - trailer transport



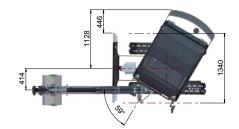
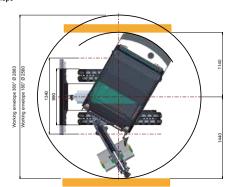


Fig. 4: Working envelope



## **LIFTING CAPACITIES**

Bucket hinge height						Load radius from center of ring gear															
Dipperstick 9	950 mm		1.5	m			2.0	) m		2.5 m			3.0 m				3.5 m				
		UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE
		ť	ij	=	<b>‡</b>	ľ	•	=	⊅	Ę	•	=	⊅	ď	•	=	<del>ب</del>	ţ	•	=	ټ
0.0	1D	-	-	-	-	-	-	-	-	0.45	0.45	0.36	0.36	0.37	0.37	0.29	0.37	-	-	-	-
2.0 m	1/1	-	-	-	-	-	-	-	-	0.45	0.45	0.36	0.36	0.37	0.37	0.27	0.37	-	-	-	-
1.0 m	P	-	-	-	-	0.79	0.79	0.47	0.75	0.54	0.54	0.35	0.53	0.43	0.43	0.27	0.42	0.35	0.35	0.21	033
1.0 m	1/1	-	-	-	-	0.75	0.75	0.45	0.74	0.54	0.54	0.34	0.53	0.43	0.43	0.26	0.42	0.28	0.28	0.20	0.33
0.0 m	1D	-	-	-	-	0.76	0.76	0.42	0.70	0.56	0.56	0.32	0.53	0.43	0.43	0.26	0.42	0.33	0.33	0.20	0.28
0.0 111	1/1	-	-	-	-	0.60	0.60	0.41	0.70	0.42	0.42	0.31	0.53	0.32	0.32	0.25	0.42	0.33	0.33	0.19	0.28
-0.75 m	12	-	-	0.59	0.76	0.62	0.62	0.41	0.57	0.47	0.47	0.31	0.45	0.37	0.37	0.24	0.34	-	-	-	-
-0.75 M	1/1	-	-	0.56	0.74	0.60	0.60	0.40	0.57	0.47	0.47	0.30	0.45	0.37	0.37	0.23	0.34	-	-	-	-

Bucket hinge height						Load radius from center of ring gear															
Dipperstick 1	1150 mm		1.5	m			2.0	m		2.5 m			3.0 m				3.5 m				
		UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE	UR	UE
		ď	ħ	=	<b>‡</b>	ľ	•	=	⊅	ď	•	=	⊅	ď	•	=	<b>‡</b>	Į	•	=	<b>‡</b>
0.0	1D	-	-	-	-	-	-	-	-	0.31	0.31	0.33	0.29	0.28	0.28	0.29	0.28	0.26	0.26	0.20	0.28
2.0 m	1/1	-	-	-	-	-	-	-	-	0.31	0.31	0.29	0.29	0.28	0.28	0.28	0.28	0.26	0.26	0.16	0.28
10	1D	-	-	-	-	0.63	0.63	0.44	0.60	0.44	0.44	0.31	0.43	0.35	0.35	0.25	0.34	0.29	0.29	0.19	0.29
1.0 m	1/1	-	-	-	-	0.63	0.63	0.38	0.60	0.44	0.44	0.29	0.43	0.35	0.35	0.24	0.34	0.29	0.29	0.18	0.29
0.0	112	-	-	-	-	0.69	0.69	0.41	0.64	0.50	0.50	0.28	0.50	0.37	0.37	0.21	0.37	0.28	0.28	0.20	0.27
0.0 m	1/1	-	-	-	-	0.54	0.54	0.38	0.64	0.50	0.50	0.27	0.50	0.37	0.37	0.21	0.37	0.28	0.28	0.17	0.27
0.75	112	-	-	0.51	0.77	0.54	0.54	0.39	0.51	0.39	0.39	0.29	0.38	0.28	0.28	0.28	0.29	0.21	0.21	0.22	0.21
-0.75 m	1/1	-	-	0.50	0.77	0.54	0.54	0.34	0.51	0.39	0.39	0.26	0.38	0.28	0.28	0.20	0.29	0.21	0.21	0.22	0.21

All values in tons (t) were determined acc. to ISO 10567 and include a stability factor of 1.33 or 87% of the hydraulic lifting capacity. All values were determined with quick-attach system but without bucket. In case of mounted-on work attachments, the deadweights of the work attachments must be deducted from the permissible operating loads

Working equipment: Rubber tracks

Abbreviations: UR = Undercarriage retracted, UE = Undercarriage extended

## **WORK ATTACHMENTS**

## **BUCKETS**

Bucket, QAS	250 mm wide, capacity 21 l, 27 kg
Bucket, QAS	300 mm wide, capacity 26 l, 30 kg
Bucket, QAS	400 mm wide, capacity 37 l, 35 kg
Bucket, QAS	500 mm wide, capacity 48 l, 41 kg
Bucket, QAS	600 mm wide, capacity 59 l, 46 kg
Ditch-cleaning bucket, QAS	1000 mm wide, capacity 91 l, 79 kg
Swing bucket, QAS	1000 mm wide, capacity 49 l, 79 kg

## **GRABS**

Clamshell grab GL 1250, grab swing brake set of shells 250 mm wide, capacity 45 I

## **OTHER WORK ATTACHMENTS**

Hydraulic hammer	Cutting unit
Augers	Quick-change adapter for hydraulic hammer
Bolt-on load hook for bucket rod	Further work attachments available on request

## **OPTIONAL EQUIPMENT**

#### **CRAWLER CHAIN OPTIONS**

Rubber tracks (long pitch), 230 mm wide

## **BOOM OPTIONS**

Monobloc boom, with extended dipperstick 1150 mm

#### **HYDRAULIC SYSTEM**

Terex 'Fingertip' control (electro proportional) incl. second additional control circuit on left joystick, including holding function for continu-

ous operation, actuation via rollers Quick couplings for control circuit for work attachments (hammer hydraulics) incl. open

Quick couplings for 2<sup>nd</sup> additional control circuit

Biodegradable hydraulic oil / ester-based HLP 68 (Panolin)

#### **OPERATOR'S STAND**

Operator's seat (standard version), imitation leather

#### CAB

Hose-rupture / load-retaining valves for boom

Supplementary set "Clamshell grab opening /

closing", without quick couplings, for standard

Quick couplings for supplementary set "Clam-

and dipperstick cylinders

shell grab opening/closing"

Rain guard

Lighting package: Cab-mounted working floodlight front right and rear right, boom-mounted

working floodlight, yellow beacon Fire extinguisher, ABC powder 2 kg FOPS - skylight guard

Crane lifting gear

Special colour options

Radio set installation kit (speakers)

## OTHER OPTIONAL EOUIPMENT

Mechanical quick-attach system

Quick-attach system, mechanical

(genuine Lehnhoff system), type MS01 or MS03

Safety package: hose-rupture / load-retaining valves for boom and dipperstick cylinders, fire extinguisher, immobilizer, motion alarm

Back-up alarm, signal-horn (can be switched off) Immobilizer, transponder key

Further optional equipment available on request

## www.terex.com/construction

Effective Date: April 2016. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product. Terex makes no other warranty, express or implied. Products and services listed may be trademarks, service marks or trade-names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. "Terex" is a registered trademark of Terex Corporation in the USA and many other countries. Copyright © 2016 Terex Corporation (R4 241116) Ref. no.: TEREX852EN

Terex Compact Germany GmbH Kraftwerkstrasse 4 D-74564 Crailsheim

Phone: +49 (0)7951 / 9357-0 Fax: +49 (0)7951 / 9357-671

construction@terex.com www.terex.com



